Amendments to the Claims:

Please amend claims 1 and 2 as follows. Please cancel claims 3 and 7-17 without prejudice to continued prosecution. The claims and their status are shown below.

1. (Currently Amended) A method of detecting the presence or absence of a neuromyelitis optica (NMO) [[NMO]]-specific autoantibody in a biological sample from an individual, comprising the steps of:

contacting said biological sample with a NMO antigenic polypeptide or fragment thereof, wherein said NMO antigenic polypeptide is aquaporin-4, wherein said fragment of said NMO antigenic polypeptide is a polypeptide for which a NMO-specific autoantibody has specific binding affinity; and

detecting the presence or absence of binding of said NMO antigenic polypeptide to said NMO-specific autoantibody in said biological sample,

wherein the presence of said binding of said NMO antigenic polypeptide to said NMO-specific autoantibody is indicative of NMO in said individual.

2. (Currently Amended) The method of claim 1, wherein the presence of said NMO-specific autoantibody in said biological sample is associated with vision impairment, weakness, numbness, spasms or abnormal or painful sensations, ~~and/or~~ loss of bladder control, ~~and/or~~ or loss of bowel control in said individual.

3. (Canceled)

4. (Original) The method of claim 1, wherein said NMO antigenic polypeptide is a recombinantly-expressed NMO antigenic polypeptide.

5. (Original) The method of claim 1, wherein said NMO-specific polypeptide is in a solid tissue selected from the group consisting of brain, spinal cord, optic nerve, kidney, or stomach.

6. (Original) The method of claim 1, wherein said biological sample is selected from the group consisting of blood, serum, plasma, and cerebrospinal fluid.

7-17. (Canceled)